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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-21 (Canceled)

21. (Currently amended) A method of transferring a DNA or RNA polynucleotide of analog thereof into a eukaryotic or prokaryotic cell in vivo or in vitro, the method comprising contacting the cell with a DNA or RNA polynucleotide or analog thereof and a compound of formula (I):

wherein Y_1 and Y_2 , which may be the same or different, are carbohydrate groups;

R₁ and R₂, which may be the same or different, are selected from the group consisting of:

hydrogen,

C₍₁₋₂₄₎ alkyl group,

C₍₁₋₂₄₎ alkyl carboxy group, and

a carbon chain of 2 to 24 carbon atoms having one or more carbon/carbon double bonds; and n is from 1 to 10; or a pharmaceutically acceptable salt thereof.

- 22. (Previously presented) The method of claim 21 wherein the carbohydrate groups Y_1 and Y_2 are sugars.
- 23. (Previously presented) The method of claim 21 wherein R_1 and R_2 are alkyl groups of chainlength $C_{(10-20)}$ and n is between 2 and 8.
- 24. (Previously presented) The method of claim 23 wherein R_1 and R_2 are alkyl groups of chain-length $C_{(12-18)}$ and n is 4 or 6.

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- 25. (Previously presented) The method of claim 21 wherein R_1 and R_2 are carbon chains of 2 to 24 carbon atoms having one or more carbon/carbon double bonds.
- 26. (Previously presented) The method of claim 25 wherein the carbon chains have 18 carbon atoms.
- 27. (Previously presented) The method of claim 21 wherein the compound is symmetrical, that is the groups R_1 and R_2 are the same, and Y_1 and Y_2 are the same.
- 28-30 (Canceled)
- 31. (Previously presented) The method of claim 21 wherein the polynucleotide is transferred into the cell in culture.
- 32. (Currently amended) A compound of formula (I):

wherein Y_1 and Y_2 , which may be the same or different, are carbohydrate groups; one of R_1 and R_{27} which may be the same or different, are is selected from the group consisting of hydrogen, a $C_{(1-24)}$ alkyl group, a $C_{(1-24)}$ alkylcarboxy group, and a carbon chain of 2 to 24 carbon atoms having one or more carbon/carbon double bonds; the other of R_1 and R_2 is selected from the group consisting of hydrogen, a $C_{(1-24)}$ alkyl group, and a carbon chain of 2 to 24 carbon atoms having one or more carbon/carbon double bonds; and n is from 1 to 10; or a pharmaceutically acceptable salt thereof.

- 33. (Previously presented) The compound of claim 32 wherein R_1 and R_2 are alkyl groups of chain-length $C_{(10-20)}$ and n is between 2 and 8.
- 34. (Previously presented) The compound of claim 33 wherein R_1 and R_2 are alkyl groups of chain-length $C_{(12-18)}$ and n is 4 or 6.

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- 35. (Previously presented) The compound of claim 32 wherein the compound is a gemini compound where R_1 and R_2 are the same and Y_1 and Y_2 are the same.
- 36. (Previously presented) The compound of claim 35 which has the formula (II):

$$\begin{array}{c|c} \operatorname{Glu} & & & \operatorname{Glu} \\ & & & & \\ & & &$$

wherein Glu is glucose in open chain form (glucitol).

- 37. (Currently amended) The compound of claim 32 wherein one of R_1 or and R_2 is an alkyl group of chain-length $C_{(1-24)}$, and the other of R_1 and R_2 is a $C_{(1-24)}$ alkyl carboxy group.
- 38. (Previously presented) The compound of claim 32 wherein R_1 and R_2 are carbon chains of 2 to 24 carbon atoms having one or more carbon/carbon double bonds.
- 39. (Previously presented) The compound of claim 38 wherein the carbon chain has 18 carbon atoms.
- 40-41 (Canceled)